

**Notice of Allowability**

Application No.

10/733,540

Applicant(s)

STIMPFL ET AL.

Examiner

Ruth C. Rodriguez

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to communication filed on 30 June 2006.
2. ☒ The allowed claim(s) is/are 9, 2, 8 and 10-13 that will be renumbered 1-7 respectively.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some\* c) ☐ None of the:
- ☒ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

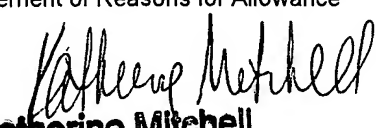
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
- ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

- ☐ Notice of Informal Patent Application
- ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
- ☐ Examiner's Amendment/Comment
- ☒ Examiner's Statement of Reasons for Allowance
- ☐ Other \_\_\_\_\_

  
**Katherine Mitchell**  
Primary Examiner

### ***Drawings***

The drawings are objected to because reference character "16" should be replaced with --6-- in Figure 3 and reference character "6" should be replaced with ---16--. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Reasons for Allowance***

The following is an examiner's statement of reasons for allowance:

Cartwright discloses a connection between a steering mechanism and a steering column of a vehicle steering system. The connection comprises a steering coupling that connects these two components. The steering coupling has one end attached to one of the components and another end having a coupling piece movable in an articulated manner about an axle of articulation. The coupling piece forms a coupling partner with the other component and comprises two clamping jaws. The two clamping jaws engage around a section of the other component after the coupling piece has been pivoted about the axis of articulation. A clamping screw is inserted into two openings formed in the clamping jaws. The screw is screwed into a thread in such a manner that the section which is engaged around is secured by the clamping jaws. The coupling piece has a stop that bears in the connecting position against the upper side of the section of the other component. Cartwright fails to disclose that the coupling piece further comprises at least one bolt and groove. However, JP '561 teaches a coupling piece comprising two jaws. The two clamping jaws engage around a section of a component. A clamping screw is inserted into two openings formed in the clamping jaws. The screw is screwed into a thread in such a manner that the section which is engaged around is secured by the clamping jaws. At least one bolt is arranged on the coupling piece. The bolt engages in a connecting position a groove of the component. The groove has an end section that runs perpendicularly in the vertical direction with respect to the axial extent of the connecting partner bearing the groove in which the bolt has its end position. The groove serves to keep the coupling piece and the component temporarily connected until the screw that passes through the clamping jaws is applied. Therefore,

it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the bolt and groove taught by JP '561 in the connection of Cartwright. Doing, so serves to keep the coupling piece and the component temporarily connected until the screw that passes through the clamping jaws is applied. JP '561 fails to disclose that the groove is open in the vertical direction at the end remote from the end position and that it widens in a funnel-shaped manner following a section towards the end remote from the end position. However, Kraus demonstrates a groove open in the vertical direction at the end remote from the end position and that it widens in a funnel-shaped manner following an section towards the end remote from the end position. The funnel-shape of the groove serves as a guide for the member engaging the groove and helps to keep the member in place. Therefore, it would have been obvious to one having ordinary skill in the art at the time of Applicant's invention to provide the groove demonstrated by Kraus in the connection disclosed by Cartwright and modified by JP '561 where the groove is open upward of the section of the other component in order to be received within the clamping jaws of the coupling piece by engaging the bolt within the groove. Doing so, serves to guide the bolt of the coupling piece and also serves to secure the bolt. JP '561 discloses that the bolt is fixedly mounted on the associated connecting partner and the bolt engages the groove through a ball enclosed within the bolt that is biased by a spring towards the groove. JP '561 fails to disclose that the bolt is mounted rotatably in the manner of a roller on the associated connecting partner. Accordingly, it would not have been obvious to one having ordinary skill in the art at the time the invention was made to have the

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connection disclosed by Cartwright that is modified with the groove and pin disclosed by JP '561 and where the groove is modified in accordance to teachings of Krauss to further modify the bolt and have it rotatably mounted in the manner of a roller on the associated connecting partner instead of providing a ball on its inner surface that is biased towards engagement with the groove.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

McClanahan et al. (US 5,628,578), Oka et al. (US 6,565,446 B2) Crudele (US 6,739,790 B1) are cited to show state of the art with respect to connections between a steering mechanism and a steering column having some of the features being claimed by the current application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruth C. Rodriguez whose telephone number is (571) 272-7070. The examiner can normally be reached on M-F 07:15 - 15:45.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. J. Swann can be reached on (571) 272-7075.

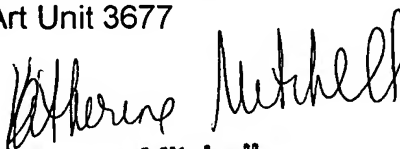
Submissions of your responses by facsimile transmission are encouraged. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-6640.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

rcr  
September 18, 2006

Ruth C. Rodriguez  
Patent Examiner  
Art Unit 3677

  
**Katherine Mitchell**  
Primary Examiner